RECEIVED CENTRAL FAX CENTER

AUG 1 4 2007

Doc Code: AP.PRE.REQ

PTO/SB/33 (07-05)
Approved for use through xx/xx/200x, OMB 0851-00xx
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number

PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number		
		60246-220; 10691		
CERTIFICATE OF FACSIMILE	Application Number		Filed	
I hereby certify that this Pre-Appeal Brief Request For Review and Notice of Appeal are being facsimile transmitted to (571) 273-8300.	10/736,	921	12/16/2003	
on August 14, 2007	First Named Inventor		•	
Signature	Wei	Wei		
2.	Art Unit E		Examiner	
Typed or printed Laura Combs	17543		Mayekar, Kishor	
Applicant requests review of the final rejection in the above with this request.	⊱identined a	pplication. No	amendments are being filed	
This request is being filed with a notice of appeal.				
The review is requested for the reason(s) stated on the atta Note: No more than five (5) pages may be provide		(s).	·	
I am the	Marks			
applicant/inventor.		11/11	Signature	
assignee of record of the entire interest. See 37 CFR 3.71, Statement under 37 CFR 3.73(b) is enclosed.	Ma	Matthew L. Koziarz		
(Form PTO/SB/96)		Typed or printed name		
attorney or agent of record. 53,154		8-988-8360·	anhara numbar	
			ephone number	
attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34	_Aı	igust 14, 200)7 Date	
regionation (mitted it admit) thind: 37 CFR 1.34	<u> </u>		USIO	
NOTE: Signatures of all the inventors or assignees of record of the entire Submit multiple forms if more than one signature is required, see below		eir representative(s	e) are required.	
· ·				

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Petent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Abxandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Serial No. 10/736,921 60246-220; 10691

I. Rejection of Claims 1-21, 28-30, 34, 36, and 37 under §112, first paragraph.

The Examiner argues that the specification does not enable all of the group VIII metals, such as rhodium. The test for enablement is whether the specification contains sufficient information to enable one of ordinary skill in the art to make and use the claimed invention without undue experimentation. The initial burden lies with the Examiner to establish that undue experimentation would be required. However, the rejection does not appear to consider undue experimentation or provide any explanation of how an unreasonable amount of experimentation would be required to practice the claimed invention. For this reason alone, the rejection should be withdrawn.

Additionally, since the specification teaches (see paragraph 31) that group VIII metals, such as rhodium, ruthenium, palladium, iridium, osmium, or platinum can be used in the intermediate layer 44, there is no basis for concluding that undue experimentation would be required to use the listed group VIII metals in the intermediate layer. The listing of the Group VIII metals in paragraph 31 therefore suggests that all of these Group VIII metals would oxidize the intermediate substance as recited in the claims. For this additional reason, the specification is enabling and the rejection should be withdrawn.

II. Rejection of claims 1-21, 28-30, 34, 36, and 37 Under §112, First Paragraph

The Examiner argues that the limitation of the reaction between the third layer and the second intermediate substance is new matter that is not supported in the specification. The Examiner commented in the Advisory Action that Applicant's previous argument did not reflect the reaction between the third layer and the second intermediate substance. Indeed, Applicant's previous argument did address this concern by noting that the intermediate layer oxidizes contaminants to produce carbon dioxide and that the inner layer (e.g., a third layer) oxidizes the carbon dioxide. Thus, there is at least one example in the specification illustrating that the inner (third) layer would oxidize the carbon monoxide the carbon dioxide produced from the intermediate layer as claimed. For this reason, the claims do not include new matter and the rejection should be withdrawn.

AUG 1 4 2007

Serial No. 10/736,921 60246-220; 10691

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Wei

Serial No.:

10/736,921

Filed:

December 16, 2003

Group Art Unit:

1753

Examiner:

Mayekar, Kishor

Title:

MULTI-LAYERED PHOTOCATALYST/THERMOCATALYST

FOR IMPROVING INDOOR AIR QUALITY

Commissioner for Patents P.O. Box 1450 Alexandria VA 22313-1450

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Dear Sir:

In response to the final Office Action mailed on 14 May 2007, Applicant respectfully submits a Pre-Appeal Brief Request for Review. This Request is filed with a Notice of Appeal. As will be explained in further detail, the Review is requested for the reasons set forth below.

- I. Claims 1-21, 28-30, 34, 36, and 37 were improperly rejected under 35 U.S.C. §112, first paragraph.
- II. Claims 1-21, 28-30, 34, 36, and 37 were improperly rejected under 35 U.S.C. § 112, first paragraph, as including new matter.
- III. Claims 22 and 31 were improperly rejected under 35 U.S.C. §103(a).
- IV. Claims 24-27, 32, and 33 were improperly rejected under §103(a).

Serial No. 10/736,921 60246-220; 10691

III. Rejection of Claims 22 and 31 Under §103(a)

Claims 22 and 31 were rejected as being obvious over Kobayashi in view of Reisfeld. The rejection does not include proper motivation for modifying the base reference Kobayashi with the secondary reference Reisfeld. In the Final Office Action of 14 May 2007 (page 5), the Examiner argues that "the motivation or benefit from the proposed modification would be the application of Kobayashi's photocatalytic material to Reisfeld's air purification in the enhancement of the photocatalytic oxidation of organic compounds in the air stream." Thus, the stated motivation is for modifying Reisfeld with Kobayashi's photocatalytic material, not for modifying Kobayashi with Reisfeld. The rejection does not state any motivation for modifying Kobayashi with Reisfeld. For this reason, the rejection does not establish *prima facie* obviousness and should be withdrawn.

IV. Rejection of Claims 24-27, 32, and 33 Under §103(a)

The Examiner argues (see page 5, last paragraph of the final office action) that the motivation for making the proposed combination would be "enhancing the photocatalytic oxidation of organic compounds in the air stream" of Reisfeld. Respectfully, this motivation does not provide a reason for selecting or using the recited coating compositions and arrangement. That is, the benefit of the claimed compositions and arrangement is only known through Applicant's disclosure. The rejection does not provide any motivation that would be known outside of applicant's disclosure for selecting the claimed coating compositions and arrangement. For this reason, the rejection does not establish *prima facie* obviousness and the rejection should be withdrawn.

Applicant believes that no additional fees are necessary, however, the Commissioner is authorized to charge Deposit Account No. 03-0835 in the name of Carrier Corporation for any additional fees or credit the account for any overpayment.

Respectfully submitted,

Matthew L. Koziarz, Reg No. 53,154

Carlson, Gaskey & Olds (400 W. Maple Road, Ste. 350

Birmingham, MI 48009

(248) 988-8360

Dated: August 14, 2007

Serial No. 10/736,921 60246-220; 10691

CERTIFICATE OF TRANSMISSION UNDER 37 CFR 1.8

I hereby certify that this correspondence is being facsimile transmitted to the United

States patent and Trademark Office, fax number (571) 273-8300, on August 14, 2007.

Laura Combs